

Additionally, and at his own initiative, Applicant submits herewith a replacement drawing sheet with a corrected Figure 3 for approval by the Examiner. Applicant's originally filed informal drawing of Figure 3 identified the integrated power source and microprocessor with the words "battery" and "microprocessor" rather than by the use of reference numerals 42 and 41, respectively. The substitute drawing sheet replaces the word "battery" with the reference number 41 (shown in red) and replaces the word "microprocessor" with the reference number 42 (in red), consistent with the reference numbers utilized in the rest of the specification. Applicant believes the drawing correction of Figure 3 conforms to the requirements of 37 C.F.R. § 1.121(d) and respectfully request approval by the Examiner to the proposed drawing corrections of Figures 1 and 3 and the substitute drawing sheets submit herewith by Applicant.

Claim Rejections under 35 U.S.C. § 102

The Examiner rejected claims 1-4, 6-12, 14 and 15 under 35 U.S.C. 102(b) as being anticipated by Laberge, et al., '716. The Office Action states that Laberge discloses an apparatus for treating disorders comprising one or more lights (70, 72), a sound source (68), a microcontroller (52), a power source, a surface (56) on which lights are positioned, and various types of lights (col. 12 lines 8-17).

Claims 16-18 and 22-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Lopez-Claros. The Action states that Lopez-Claros discloses a method of stimulating the brain

including the steps of identifying a non-dominant hemisphere and selectively stimulating the non-dominant visual cortex.

Anticipation under § 102 requires that a single reference teach (*i.e.*, identically describe) each and every element or step of the rejected claim. *Atlas Powder v. E.I. du Pont*, 750 F.2d 1569, 224 U.S.P.Q. 409 (Fed. Cir. 1984), *Jamesbury Corp. v. Litton Industrial Products*, 756 F.2d 1556, 225 U.S.P.Q. 253 (Fed. Cir. 1985). The Federal Circuit has expressly mandated that functional claim language be considered in evaluating a claim relative to the prior art. *Lewmar Marine, Inc. v. Barient, Inc.*, 827 F.2d 744, 3 U.S.P.Q.2d 1766 (Fed Cir. 1987); *In re Calwell*, 138 U.S.P.Q. 243 (C.C.P.A. 1963). The old PTO doctrine that inventions may not be functional "at the point of novelty" has been overruled. *In re Swinehart*, 439 F.2d 210, 169 U.S.P.Q. 226 (C.C.P.A. 1971). The results and advantages produced by a claimed invention, of which the prior art is devoid, cannot be ignored simply because the claim limitations of the invention are similar to those of the prior art. *United States v. Adams*, 383 U.S. 39, 148 U.S.P.Q. 479 (1966).

Applicant has amended claims 1, 9 and 16 to clarify that the present invention is portable and self-contained. In particular, the microprocessor is integral with the apparatus. Support for the amendments may be found at page 7, lines 15 and 16 of Applicant's specification: "The lights 12 and microprocessor 41 may be an integral part of the surface 11 and may have a self-contained power source 42". Support may also be found in Figure 3 of Applicant's specification, which depicts an embodiment of Applicant's invention in the form of glasses/goggles/spectacles

with the microprocessor 41 and power source 42 integrally located in the ear-support structure of the embodiment.

Integration of the microprocessor and power supply makes the apparatus mobile. The patient may use the apparatus anywhere and may even use the apparatus while geographically roaming. For example, while being a passenger in an automobile or airplane.

Applicant respectfully believes that the claims as amended provide and clarify the structural basis for allowance of the claims. Integration of the microprocessor (and power supply) yields a structural element that is not disclosed, suggested or taught by Laberge. Applicant respectfully urges that the claims as amended are not anticipated by Laberge under 35 U.S.C. 102(b) since, by failing to disclose an apparatus comprising an integrated microprocessor and power supply, the reference does not disclose *all* the claim limitations of the present invention.

Applicant respectfully believes that the characterization in the Action of Laberge's apparatus as one that "treat[s] disorders" is problematic. Laberge discloses an apparatus for inducing "lucid dreaming," which is the mental state wherein one is aware that one is dreaming. The mischaracterization in the Office Action may suggest to some that the absence of lucid dreaming is a disorder, whereas exactly the opposite is true. Non-lucid dreaming (ordinary dreaming) is the normal condition, not a disorder. In fact, one might argue that the apparatus of Laberge is intended to create a disorder in a person in which previously a disorder did not exist.

Giving Laberge the benefit of the doubt, however, one might characterize his apparatus as one that alters a person's state of consciousness, and leave it to history whether or not such alteration is beneficial. At any rate, the distinction between treating a disorder and altering consciousness is significant with respect to the basis for rejecting the claims. By definition, Laberge's apparatus operates on the conscious level to the extent that it is intended to induce a state of awareness while sleeping. The present invention, in contrast, operates on the unconscious level, even though the present invention may be used by someone who is awake. The apparatus and methods of the present invention stimulate the sensory-interpreting areas of the brain to strengthen neuronal pathways that are weakly developed in the patient (such as the non-dominant hemisphere). The pathway reinforcement occurs unconsciously in the patient.

The distinction between conscious and unconscious modes of operation is supported by Laberge's own disclosure. Laberge specifies that the stimulation provide by his apparatus must not awaken the sleeper (see claim 1) yet it must induce awareness of dreaming. Laberge teaches that (1) the patient must be asleep before using his invention and (2) the patient must not be awoken by using his invention. The present invention, in contrast to Laberge, may be used on a person that is awake. Laberge, therefore, teaches away from the present invention.

One element of the present invention, a microprocessor, is cited in the Office Action as being disclosed by Laberge, et al. The Office Action specifies that Laberge reference numeral (52) corresponds to applicant's microprocessor. The Laberge specification, however, identifies (52) as the main unit housing. At Col. 12, lines 28-30, the main unit housing (52) is described as

being made of ABS plastic which is molded and machined. The main unit housing (52), therefore, is not equivalent to applicant's microprocessor.

Applicant's invention comprises an apparatus, the novel structure of which makes possible the uses recited in the claims, such as portability. The structure of Applicant's invention is patentably distinct from the cited devices, and the benefits of Applicant's invention flow from its structure. While Applicant's invention provides and claims benefits not found in the cited art, the basis for allowance of the claims lies in the structural elements from which those benefits accrue.

Laberge does not disclose a self-contained apparatus. For example, Laberge explicitly discloses "a flexible multi-conductor electrical cable 38" that connects the facemask 34 to the main unit housing 52 (col. 6, lines 59-62) and the main unit housing "is placed on the table 42" (col. 12, lines 24-25). Laberge discloses a plug-in wall transformer to power the equipment and to charge a battery for portable use of the equipment (col. 12, lines 40-42). The Laberge equipment, however, is not self-contained in that the main unit housing is independent of the face mask except for being connected by an electrical cable. To be portable, one would have to carry the main unit housing either connected or disconnected from the facemask. In contrast, the present invention is fully self-contained in that all of the equipment to power and operate the apparatus is contained in the apparatus to provide a unitary apparatus that does not require connection to an external power supply or computer.

The self-contained nature of the present invention provides advantages that are not available with the apparatus of Laberge. For example, the present invention may be used while one is walking, listening to the radio, watching TV, waiting in line or in a waiting room and so forth. Laberge, in contrast, can only be used when one is asleep. Laberge is not portable in the sense that it cannot be used in a location or situation where one cannot or would not sleep, as in the situations described above for the present invention. Laberge does not disclose portability of *use*, but merely discloses portability of equipment.

Applicant respectfully submits that the present invention is not anticipated by Laberge, et al., under section 102(b) because Laberge does not teach a self-contained apparatus as an element of the invention.

Applicant respectfully requests reconsideration by the Examiner and withdrawal of the claim rejections over Laberge, et al., under section 102(b).

Lopez-Claros

Claims 16-18 and 22-27 were rejected under 35 U.S.C. 102(b) as being anticipated by Lopez-Claros. The Action states that Lopez-Claros discloses a method of stimulating the brain including the steps of identifying a non-dominant hemisphere and selectively stimulating the non-dominant visual cortex.

Applicant has amended claim 16 to recite that the method is for treating a person who has been diagnosed with dyslexia. Further, the claim is amended to include the step of providing an apparatus of the invention. The amended claim clarifies that the patient is treated with the apparatus. Additionally, the claim has been amended to recite that the apparatus comprises one or more sound sources. Applicant respectfully submits that claims 16-18 and 22-27 as amended are not anticipated by Lopez-Claros under section 102(b).

Applicant respectfully requests reconsideration by the Examiner and withdrawal of the claim rejections over Lopez-Claros under section 102(b).

Claim Rejections under 35 U.S.C. § 103

The Examiner rejected claims 5 and 13 under 35 U.S.C. 103(a) as being unpatentable over Laberge, et al., in that it would be an obvious modification of Laberge to provide plane polarized light.

The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. *In re Fritch*, 972 F.2d 1260, 1266, 12 U.S.P.Q.2d 1780, 1783-4 (Fed. Cir. 1992). The desirability of the modification to Laberge suggested by the Examiner are not suggested by the reference itself. Further, Applicant established above that the independent claims from which claims 5 and 13 depend are allowable and, therefore, claims 5 and 13 are also allowable.

Claims 19 and 20 were rejected under 35 U.S.C. 103(a) as being unpatentable over Lopez-Claros. Applicant established above that the independent claim from which claims 19 and 20 depend is allowable. Claims 19 and 20, therefore, are also allowable.

Claim 21 was rejected under 35 U.S.C. 103(a) as being unpatentable over Lopez-Claros further in view of Laberge, et al. Applicant established above that the independent claim from which claim 21 depends is allowable and, therefore, claim 21 is also allowable.

Applicant urges that the present invention comprising an integrated microprocessor whereby the invention is mobile and portable is *not* obvious in view of Laberge or Lopez-Claros as a mere engineering design choice. The Board of Patent Appeals and Interferences has held that a Patent Examiner's assertion that a modification is an obvious matter of engineering design choice is an unsupported conclusion – not a reason upon which to base a rejection. *In re Garret*, 33 BNA PTJC 43 (Nov. 13, 1986). There is crucial difference between obviousness of the subject matter “as a whole” under § 103 and the obviousness of a particular difference between the prior art and the invention. *Schenk, A.G. v. Nortron Corp.*, 713 F. 2d 782, 218 USPQ 689 (Fed. Cir 1983). The MPEP cites *Schenk* to illustrate how making an element integral may be patentable. Nortron argued that that the invention just made integral what had been made in four bolted pieces. The court found this unpersuasive and held that the claims were patentable because the prior art perceived a need for mechanisms to dampen resonance, whereas the inventor eliminated the need for dampening via the one piece gapless support structure, showing insight that was contrary to the understandings and expectations of the art. MPEP § 2144.04(e).

The present invention likewise shows insight contrary to the understandings and expectations of the art. Both Laberge and Lopez-Claros expect that the patient will undergo treatment by light in a doctor's office, at home or some other fixed location or while sleeping. The understanding of the prior art is that light therapy occupies so much of the patient's visual field as to preclude much mobility by the patient during treatment because the patient cannot see where he is going or is asleep. Therefore, the prior art perceived a need for substantially stationary therapy. This expectation of stationary treatment is reinforced in the prior art where control or programming of the light sequence is performed by a computer, since computers, typically, are substantially stationary. Had either of these references expected therapy to occur while the patient was in motion, specific reference to such capability, and structural elements, such as the integrated microprocessor and power supply of the present invention to accomplish mobile treatment would have been taught. The present invention incorporates the non-obvious insight that busy people may require treatment on the go such as while they are passengers in an automobile or airplane and provides the structural elements to meet this need. The present invention, therefore, is not a mere design choice, but is an invention structured to meet needs that were not expected or understood by the prior art.

Applicant, therefore, respectfully requests reconsideration by the Examiner, withdrawal of the claim rejections under § 103, and advancement of all claims to allowance.



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CONCLUSION

In view of the foregoing amendments and remarks it is respectfully submitted that this application and all pending claims therein are in condition for allowance and such is courteously requested.

Respectfully submitted,

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